

## Complex compounds of phosphorous esters

### Communication 3. Complex compounds with mercury salts

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#### Abstract

1. It has been found that mercuric halides react with full esters of phosphorous acid with formation of complex compounds. The following compounds have been isolated in the crystalline form:  $[\text{HgBr}_2 \cdot \text{P}(\text{OCH}_3)_3]_2$ ;  $[\text{HgCl}_2 \cdot \text{P}(\text{OC}_2\text{H}_5)_3]_2$ ;  $[\text{HgBr}_2 \cdot \text{P}(\text{OC}_2\text{H}_5)_3]_2$ ;  $[\text{HgCl}_2 \cdot \text{P}(\text{OC}_3\text{H}_7\text{-i})_3]_2$ ;  $[\text{HgBr}_2 \cdot \text{P}(\text{OC}_3\text{H}_7\text{-i})_3]_2$ ;  $[\text{HgI}_2 \cdot \text{P}(\text{OC}_3\text{H}_7\text{-i})_3]_2$ . 2. Molecular weight determinations by cryoscopy in benzene on the compounds formed showed that their molecules are dimeric. 3. The complex compounds obtained, complexes of mercuric halides with trialkyl phosphites  $[(\text{RO})_3\text{P} \cdot \text{HgX}_2]_2$ , are analogs of the corresponding phosphine complexes  $[\text{R}_3\text{P} \cdot \text{HgX}_2]_2$ , and they belong to the bridged type. © 1953 Consultants Bureau.

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